In the Claims:

1. (currently amended) A substrate including a scatterometry target and other features, each of said other features having at least one of a microelectronic function or a microelectromechanical function, said scatterometry target comprising:

a plurality of parallel elongated features extending in a first direction of said scatterometry target, each of said elongated features having a width in a widthwise direction transverse to said first direction, wherein a ratio of a length of said scatterometry target in said first direction to said width of each said elongated feature is greater than or equal to about 50, said width of said elongated features mimicking a width of said other features; and

a plurality of stress-relief features disposed at a plurality of positions along said length.

2. (previously presented) The substrate of claim 1, wherein said stress-relief features include connecting features which connect pairs of said elongated features.

3. (previously presented) The substrate of claim 1 wherein said stress-relief features include gaps, said gaps interrupting said elongated features at intervals along said length of said scatterometry target.

4. (previously presented) The substrate of claim 2 wherein said stress-relief features further include gaps, said gaps interrupting said elongated features, wherein said scatterometry target including said connecting features and said gaps is adapted to

produce a return signal mimicking a return signal from a scatterometry target not having said stress-relief features.

5. (previously presented) The substrate of claim 4 wherein said elongated features are provided in a layer of photoresist.

6. (previously presented) The substrate of claim 5 wherein said elongated features mimic patterned photoresist layer features at critical dimension.

7. (previously presented) The substrate of claim 1 wherein said stress-relief features include jogs in said elongated features.

8. (previously presented) The substrate of claim 2 wherein said connecting features include bridges, said bridges satisfying the relation $0.02 > (N_B L_B)/NL$, where N_B is the number of bridges of a grating, L_B the length of each bridge, N the number of lines of the grating, and L the length of the grating.

9. (previously presented) The substrate of claim 2 wherein said connecting features include bridges, said bridges satisfying the relation $0.02 > (N_G L_G)/NL$, where N_G is the number of gaps of a grating, L_G the length of each gap, N the number of lines of the grating, and L the length of the grating.

10. (previously presented) The substrate of claim 7 wherein said jogs satisfy the relation $f_J(N_J/N)(W/L) < 0.02$, where N_J is the number of jogs of a grating, N the number of lines of the grating, L the length of the grating, W the width of the grating, and f_J a process factor.

11. (currently amended) A substrate including a scatterometry target and other features, each of said other features having at least one of a microelectronic function or a microelectromechanical function, said scatterometry target comprising:

a plurality of parallel elongated features extending in a first direction of said scatterometry target, each of said elongated features having a width in a widthwise direction transverse to said first direction, each said elongated feature having jogs disposed at a plurality of locations along said length, said jogs causing said scatterometry target to produce a return signal which is sensitive to photolithographic defocus, wherein a ratio of a length of said scatterometry target in said first direction to said width of each said elongated feature is greater than or equal to about 50, said width of said elongated features mimicking a width of said other features.

12. (previously presented) The substrate of claim 11 wherein said jogs satisfy the relation $f_J(N_J/N)(W/L) > 1$, where N_J is the number of jogs of a grating, N the number of lines of the grating, L the length of the grating, W the width of the grating, and f_J a process factor.

13-18. (cancelled)

FIS920030158US1   -8-

19. (previously presented) The substrate of claim 1, wherein said scatterometry target is adapted to produce a return signal mimicking a return signal from a scatterometry target not having said stress-relief features.